

Druckexemplar

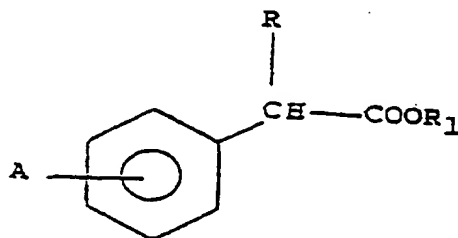
WO 00/26176

PCT/EP99/07887

11

CLAIMS

1. A process for the preparation of meta or para-substituted α -arylalkanoic acids of formula (I):



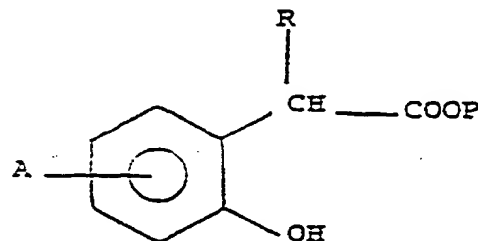
(I)

wherein:

R is hydrogen, C_1 - C_6 alkyl; R_1 is hydrogen, straight or branched C_1 - C_6 alkyl, phenyl, p-nitrophenyl, a cation of an alkali or alkaline-earth metal cation or of a pharmaceutically acceptable ammonium salt; A is C_1 - C_4 alkyl, aryl, aryloxy, arylcarbonyl, 2-, 3- or 4-pyridocarbonyl, aryl optionally substituted with one or more alkyl, hydroxy, amino, cyano, nitro, alkoxy, haloalkyl, haloalkoxy; A is at the meta or para positions;

which process comprises the following steps:

a) transformation of compounds of formula (II)



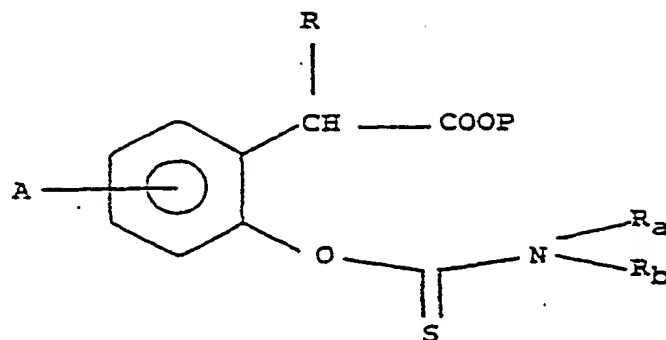
(II)

in which P is straight or branched C_1 - C_6 alkyl, phenyl, p-nitrophenyl,

WO 00/26176

PCT/EP99/07887

12
into compounds of formula (III)

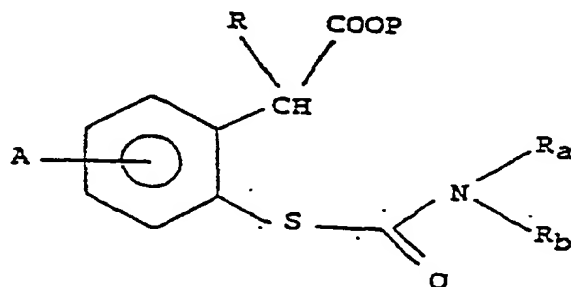


(III)

wherein

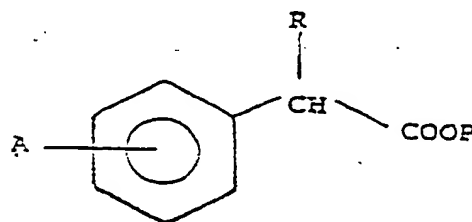
R_a and R_b are C₁-C₆ alkyl, ~~preferably methyl,~~

15 b) thermal rearrangement of compound (III) to give (IIIb)



(IIIb)

25 c) catalytic hydrogenation of (IIIb) to give (IIIc)



(IIIc)

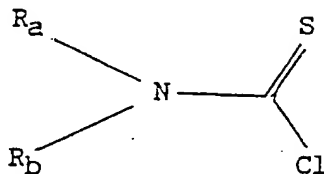
WO 00/26176

PCT/EP99/07887

13

d) transformation of (IIIc) into (I).

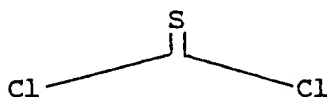
2. A process according to claim 1, in which the transformation of step a) is carried out by reaction of the compound (II) with



wherein R_a and R_b are as defined in claim 1, in the presence of an organic or inorganic base.

3. A process as claimed in claim 2, in which said organic base is selected from triethylamine and pyridine, and said inorganic base is selected from alkali or alkaline-earth carbonates.

4. A process as claimed in claim 1, in which the transformation of step a) is carried out by reaction of compound (II) with thiophosgene



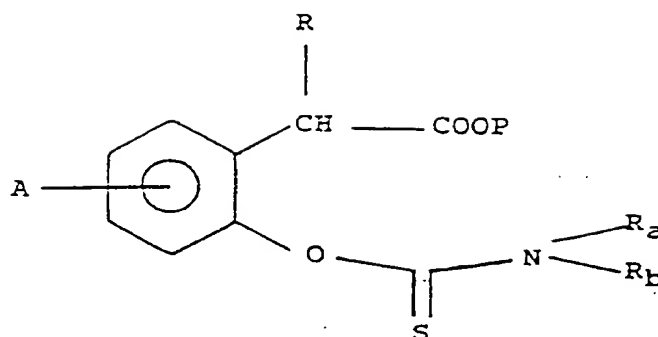
and subsequent reaction of the resulting product with HNR_aR_b , wherein R_a and R_b are as defined in claim 1.

5. A process as claimed in claim 1, in which the hydrogenation of step c) is carried out with Ni-Raney.

6. A process according to any one of the above claims, in which the group A of formula (I) is meta-benzoyl and R is methyl.

7. As a reaction intermediate, the compound

14

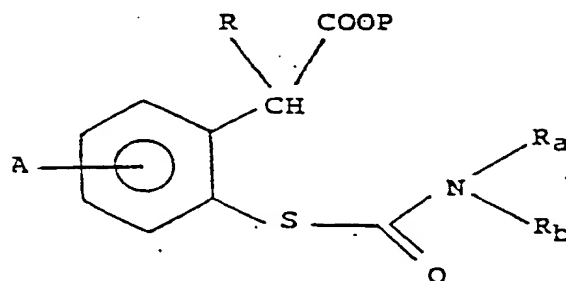


(III)

wherein:

R is hydrogen, C₁-C₆ alkyl; A is a C₁-C₆ alkyl, aryl, aryloxy, aryl optionally substituted with one or more alkyl, hydroxy, amino, cyano, nitro, alkoxy, haloalkyl, haloalkoxy, A is at the meta or para positions; P is straight or branched C₁-C₆ alkyl, phenyl, p-nitrophenyl; R_a and R_b are C₁-C₆ alkyl.

8. As a reaction intermediate, the compound



(IIIb)

wherein A, R, P, Ra and Rb are as defined in claim 7.